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IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF OREGON  
PORTLAND DIVISION

ROCKY BIXBY, et al,

Plaintiffs,

vs.

KBR INC., et al.,

Defendants.

Civil No. 3:09-cv-632-PK

KBR's Reply in Further Support of  
Motion to Exclude Plaintiffs' Expert  
Dr. Arch Carson's Testimony Re  
Genetic Transformation Injury, Remote  
Exposure Injury, and Medical  
Monitoring

ORAL ARGUMENT REQUESTED

# Table of Contents

I.	Carson’s Genetic Transformation Injury Testimony Is Inadmissible.....	1
A.	Carson Is Not Qualified .....	1
B.	Carson’s Testimony Is Not Relevant .....	2
1.	<i>Lowe, Chouinard</i> and Oregon Law.....	3
2.	<i>Dumontier, Abuan</i> and Ninth Circuit Law.....	7
C.	Carson’s Testimony Is Not Reliable.....	10
II.	Carson’s Remote Exposure Injury Testimony Is Inadmissible.....	13
III.	Carson’s Medical Monitoring Testimony Is Inadmissible.....	15
	Conclusion .....	19

# Table of Authorities

<i>Abuan v. General Elec. Co.</i> , 3 F.3d 329 (9th Cir. 1993) .....	8, 9, 10
<i>Allgood v. General Motors Corp.</i> , 2006 WL 2669337 (S.D. Ind. Sep. 18, 2006) .....	18
<i>Avila v. Willits Env't Remediation Trust</i> , 633 F.3d 828 (9th Cir. 2011) .....	2
<i>Burleson v. Texas Dep't of Criminal Justice</i> , 393 F.3d 577 (5th Cir. 2004) .....	11, 12
<i>Chouinard v. Health Ventures</i> , 39 P.3d 951 (Or. App. 2002) .....	4, 5
<i>Doe v. American Red Cross</i> , 910 P.2d 364 (Or. 1996) .....	5, 6
<i>Dumontier v. Schlumberger Tech. Corp.</i> , 543 F.3d 567 (9th Cir. 2008) .....	7, 8, 10
<i>Gen. Elec. Co. v. Joiner</i> , 522 U.S. 136, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997) .....	12
<i>Harris v. Kissling</i> , 721 P.2d 838 (Or. App. 1986) .....	6, 7
<i>Henricksen v. ConocoPhillips Co.</i> , 605 F. Supp. 2d 1142 (E.D. Wash. 2009) .....	11
<i>In re TMI Litig.</i> , 193 F.3d 613 (3d Cir. 1999) .....	15
<i>Lowe v. Philip Morris USA, Inc.</i> , 183 P.3d 181 (Or. 2008) .....	3, 4, 8, 9, 16, 17
<i>Metro-North Commuter R.R. Co. v Buckley</i> , 117 S. Ct. 2113 (1997) .....	15, 16
<i>Paul v. Providence Health Sys.-Oregon</i> , 273 P.3d 106 (Or. 2012) .....	17
<i>Whiting v. Boston Edison Co.</i> , 891 F. Supp. 12 (D. Mass. 1995) .....	11

Part I of this reply discusses plaintiffs' failure to show that Carson is qualified to testify about genetic transformation. Plaintiffs admit Carson relies on a "no threshold" theory, which courts repeatedly have found unreliable under *Daubert*. Part II discusses plaintiffs' failure to offer any evidence that "remote exposure injury" is an injury at all. This is a term Carson invented to make it sound like uninjured plaintiffs have an injury. All of Carson's opinions in this case are unreliable due to his willingness to abjure science and embrace advocacy. Part III discusses plaintiffs' failure to offer any methodology for Carson's medical monitoring opinion, and Carson's sworn admissions would render his medical monitoring opinion unreliable even if Oregon recognized a medical monitoring cause of action, which it does not.

#### I.

#### Carson's Genetic Transformation Injury Testimony Is Inadmissible

Carson is not qualified to testify about genetic transformation, and his testimony is neither relevant nor reliable.

#### A. Carson Is Not Qualified

KBR showed on pages 2-3 of its motion that Carson is not qualified to testify about genetic transformation. Carson does not practice in the field, has not done laboratory work in this field, has not published in this field, and has never conducted any cancer research. KBR submitted the declaration of Dr. Toby Rossman as Exhibit 3 to its motion. Dr. Rossman is a nationally renowned expert in the fields of carcinogenesis and genetic toxicology, and she explains Carson's lack of qualifications:

Dr. Carson is not an expert in the fields of Carcinogenic Mechanisms or Genetic Toxicology. His training and experience are in General or Clinical Toxicology, not in Genetic Toxicology or Carcinogenesis. He does not publish in journals that focus on these subjects, and the papers he has published do not deal with these

topics in any way. He shows no knowledge of modern ideas or techniques in this area.<sup>1</sup>

Plaintiffs did not rebut Dr. Rossman's declaration. Plaintiffs did not provide any evidence that Carson somehow is an expert in the fields of Carcinogenic Mechanisms or Genetic Toxicology. Nor could they. Carson himself denies having this expertise:

Q. . . . Are you an expert and do you hold yourself out as an expert and would you hold yourself out as an expert to a court of law in the field of genetic toxicology?

A. *I would not refer to myself as a genetic toxicologist, but I would refer to myself as a toxicologist.*<sup>2</sup>

Carson's general experience in the very broad field of toxicology does not qualify him to testify about the very specific subject of transformation of genes within cells. An expert's testimony is admissible only if he "stays within the reasonable confines of his subject area." *Avila v. Willits Env't'l Remediation Trust*, 633 F.3d 828, 839 (9th Cir. 2011).

B. Carson's Testimony Is Not Relevant

On page 4 of their response, plaintiffs cite Carson's deposition and represented to this Court that "Genetic transformation is an 'acute' injury that occurs at the time of exposure." Just last week, the *McManaway* plaintiffs made the exact opposite statement and represented to the *McManaway* court that "*with the exception of genetic transformation*, all of the symptoms claimed by Plaintiffs are manifest physical injuries rather than latent injuries."<sup>3</sup> According to plaintiffs (same lawyers in both cases), genetic transformation was "acute" in *Bixby*, but remains "latent" in *McManaway*. Plaintiffs' position here in *Bixby* defending Carson's testimony also is

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<sup>1</sup> Motion to Exclude X-3 at ¶ 7.

<sup>2</sup> X-4 (Carson depo) at 252:5-11.

<sup>3</sup> Dkt. No. 281, Civ. Action No. 4:10-cv-01044, in the Southern District of Texas; *see* X-5.

contrary to Carson's own opinion that "genetic transformation injury" is "asymptomatic."<sup>4</sup> The malleability of Carson's opinions may be a useful strategic litigation device for plaintiffs, but it is bad science.

1. Lowe, Chouinard and Oregon Law

Plaintiffs have taken an inconsistent position here (and gently argue against Carson's "asymptomatic" testimony) because they know that, under Oregon law, a claim for a latent, asymptomatic injury is not compensable. The Oregon Supreme Court's decision in *Lowe v. Philip Morris USA, Inc.*, 183 P.3d 181 (Or. 2008), disposes of plaintiffs' genetic injury claim. Plaintiff Lowe had smoked tens of thousands of cigarettes. *Lowe*, 183 P.3d at 182-83 & n.2. The presence of cigarette smoke in the lungs can damage cells and cause diseases, such as cancer.<sup>5</sup> Lowe had not yet developed a disease from inhaling cigarette smoke. But she argued that she should be compensated because she and other Oregonians "have suffered injury in that they have been significantly exposed to proven hazardous substances in defendants' cigarettes, and suffer significantly increased risk of developing lung cancer." *Id.* at 183. This is the same argument plaintiffs make here: they say their presence at Qarmat Ali exposed them to the hazardous substance sodium dichromate and increased their risk of developing lung cancer. But the Oregon Supreme Court rejected this argument, holding "***that the threat of future harm that plaintiff has alleged is not sufficient to give rise to a negligence claim.***" *Id.* at 186.

On page 8 of their response, plaintiffs try to avoid the conclusive effect of *Lowe* by arguing, they say, "For purposes of this analysis, the veterans contend that they have suffered actual cellular injury as a result of their exposure. This is not a case where risk of future injury is

<sup>4</sup> Motion to Exclude X-1 (Carson depo) at 263:25 – 264:12.

<sup>5</sup> See X-6, A Report of the Surgeon General: How Tobacco Smoke Causes Disease – The Biology and Behavioral Basis for Smoking-Attributable Disease Fact Sheet ("The chemicals and toxicants in tobacco smoke damage DNA, which can lead to cancer.").

the only form of injury alleged. Thus, KBR's reliance on [Lowe] is misplaced." Plaintiffs' contention simply phrases their claim in another way – they characterize their supposed "cellular injury" as both an injury in its own right *and* the basis for their supposed increased risk of future injury. That does not work under *Lowe*, as the Oregon Supreme Court repeatedly required "present physical injury" or "present physical harm." *Id.* at 182, 183, 185. As noted on page 7 of KBR's motion, **Carson himself admits that plaintiffs' alleged "cellular injury" here has not manifested in a tumor or in some other way, admits that "I cannot honestly say" that genetic or cellular injury "persists to this day for any particular individual," admits that "many of those initial injuries may well have been repaired," and Carson admits all he "honestly" can say is that "the injury has the potential to continue to exist to this day in everyone, and I can't tell who is and isn't."**<sup>6</sup> Carson fails to show that cellular transformation occurred at all, fails to show that the supposed transformation still is a "present physical injury" if it ever did occur, and fails to show that until it actually has resulted in any cancer in any of the plaintiffs. Plaintiffs are trying to word-smith their way around the Oregon Supreme Court's clear and preclusive holding in *Lowe*.

The Oregon court's decision in *Chouinard v. Health Ventures*, 39 P.3d 951 (Or. App. 2002), even more clearly demonstrates the point and fatally undermines plaintiffs' genetic transformation injury claims. The *Chouinard* plaintiff sought damages "on the proposition that the presence of a growing tumor was sufficient to establish a physical injury or impact that permits her to recover emotional distress damages." *Id.* at 954-55. While a doctor testified at trial that "if the tumor had continued to grow untreated, plaintiff would have died," the plaintiff could not prove that the tumor had caused her physical symptoms. *Id.* at 952-54. *The*

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<sup>6</sup> Motion to Exclude X-1 (Carson depo) at 263:5-12; *see also* Motion at 7-8 (Dkt. No. 306).

*Chouinard* court of appeals held that a proven, growing, and potentially fatal tumor was not a compensable injury under Oregon law when it did not cause physical symptoms:

the most that the jury could infer from the evidence was that the tumor grew, to some unspecified extent, over the four-month period. That evidence does not constitute a sufficient physical impact to permit plaintiff's claim for emotional distress to go to the jury.

*Id.* at 955. Just as a growing, potentially fatal asymptomatic brain tumor is not a compensable injury as a matter of Oregon law, plaintiffs' alleged (but unproven) asymptomatic cellular transformation here cannot be compensable as a matter of law. Indeed, plaintiffs' claims here are not nearly as strong as the legally impermissible and not compensable injury at issue in *Chouinard* – the injury in *Chouinard* was real, proven, growing, and potentially fatal, while plaintiffs' Carson-sponsored opinion here about supposed “genetic transformation injury” is hypothesized, unproven, may or may not still exist if it ever did, and the theoretical transformation is of indeterminate nature.

Plaintiffs ignored *Chouinard*. No discussion. No mention. No cite.

Instead, plaintiffs incorrectly say on page 6 of their response that “two cases demonstrate that cellular damage meets the requirements of an injury under Oregon law.” Plaintiffs are wrong. Neither case supports their position. Plaintiffs first case is *Doe v. American Red Cross*, 910 P.2d 364 (Or. 1996) – decided 12 years before *Lowe* – in which plaintiff brought a negligence claim against the Red Cross for supplying HIV-tainted blood when the plaintiff knew five years before filing suit that he had been infected upon receiving a transfusion. Plaintiffs rely on footnote 15 to support their incorrect assertion that “the Court seems to dismiss any argument that asymptomatic cell damage is not harm.” That is wishful thinking on plaintiffs' part, but it is



not what happened. The issue arose in the context of the statute of limitations, and the *Doe* Court was quite clear in footnote 15 that it declined to address the issue:

FN15. Plaintiff argues for the first time in this court that HIV infection is not itself a harm, but merely a threat of future harm not yet realized....Plaintiff did not argue to the Court of Appeals that there was an issue of fact as to when she and her husband knew that they had been harmed. Indeed, they could not properly have done so, because they conceded that issue at summary judgment. That issue, therefore, was not properly before the Court of Appeals; it was not preserved in the circuit court, nor raised in plaintiff's opening brief in the Court of Appeals. We do not address it.

*Id.* at 511 n.15.

Plaintiffs' second case is *Harris v. Kissling*, 721 P.2d 838 (Or. App. 1986), a legal malpractice action against an attorney who did not timely file plaintiff Harris' medical malpractice complaint against a hospital. Defendant Kissling admitted his own and the hospital's negligence, but challenged Harris' claimed damages. When Harris was pregnant, her Rh negative blood had combined with the unborn child's Rh positive blood to cause her to develop Rh antibodies. This happened because the hospital negligently failed to test and inoculate Harris.

As a result:

- Harris had to undergo amniocentesis four times during her pregnancy.
- Harris had to monitor the fetus's movement three times a day. On a couple of occasions, there was no movement, and she had to rush to the hospital to determine if the baby was dead.
- Harris twice had to undergo stress tests involving simulated contractions.
- The baby had to be delivered prematurely by Caesarean section.
- The baby experienced respiratory distress and had to undergo a blood transfusion when it was three days old. Harris could not see her baby for three days.
- The baby developed anemia and jaundice, and was in the hospital two weeks before being released.

- At least one physician recommended that Harris not get pregnant again.
- There was competent medical evidence that there was a 75% *chance* that the next baby would be at least as severely affected as the last one.
- There was competent medical evidence that if plaintiff got pregnant again, the prenatal medical requirements (amniocentesis, blood transfusions, and the like) would be even more onerous than the previous pregnancy.
- The hospital's negligence had resulted in an "irreversible physical change" which "permanently impaired" Harris' ability to have a normal pregnancy.

*Id.* at 839-40.

The *Harris* court did not even mention "genetic" or "cellular" injury at all; the closest it came was noting that the "failure to immunize resulted in an irreversible physical change in her blood, which has permanently impaired her ability to have a normal pregnancy." *Id.* at 840. Harris' injury dramatically, demonstrably, and physically impacted her body and her baby, and resulted in proven present and future injury. It was for these reasons – *not* because of any unmentioned genetic or cellular injury or impact – that the *Harris* court found that Harris had experienced a compensable injury. *Id.*

## 2. Dumontier, Abuan and Ninth Circuit Law

In *Dumontier v. Schlumberger Tech. Corp.*, 543 F.3d 567 (9th Cir. 2008), the Ninth Circuit weighed in on the issue of cellular injury, and squarely rejected a theory and approach almost identical to what plaintiffs and Carson are trying to do here. The *Dumontier* plaintiffs sought compensation under the federal Price-Anderson Act for their exposure to radioactive cesium-137. Their theory of injury was identical to that propounded by our plaintiffs:

Plaintiffs argue that the slightest exposure to radiation damages cells by denaturing proteins and modifying DNA. This, they argue, qualifies as bodily injury under the Act.

*Id.* at 570. The Ninth Circuit rejected this theory:

[N]ot every alteration of the body is an injury. Thinking causes synapses to fire and the brain to experience tiny electric shocks; fear stimulates the production of chemicals associated with the fight-or-flight response. All life is change, but all change is not injurious. Adopting plaintiffs' interpretation of bodily injury would render the term surplusage, as every exposure to radiation would perforce cause injury. . . .

Plaintiffs presented evidence that radiation always "damage[s] the DNA or other important cellular components." But this damage does not establish that there is or will be pain or interference with bodily functions, and thus isn't an injury within the meaning of the Act.

*Id.* at 570, 571. Plaintiffs acknowledged on pages 8-9 of their response that the Ninth Circuit's recent decision in *Dumontier* does "not support a claim for cellular change as an injury," but plaintiffs do not try to distinguish it or try to explain why their claims should be exempt from the Ninth Circuit's clear ruling.

Plaintiffs' and Carson's "genetic transformation injury" theory fails for the same reasons (and many others). Carson has not tested or studied any particular plaintiff's DNA or genetic composition, and has not differentially diagnosed how any plaintiff's unquantified alleged exposure to sodium dichromate has impacted (much less, injured) any plaintiff in any way. If any plaintiff's genetics or DNA actually has been modified by their supposed but unquantified exposure – there is zero evidence of that – it still is not at all clear that any such hypothetical change constitutes an injury. As the Ninth Circuit put it in *Dumontier*, "not every alteration of the body is an injury," and "All life is change, but all change is not injurious." *Id.* at 570.

In *Abuan v. General Elec. Co.*, 3 F.3d 329 (9th Cir. 1993), the Ninth Circuit rejected other plaintiffs' experts' opinions about no-threshold "genetic transformation" injury. Plaintiffs in *Abuan* alleged that they were exposed to PCBs at a power plant in Guam, but their expert, like Carson here, did not quantify plaintiffs' exposure dose. *Id.* at 332. The *Abuan* plaintiffs' expert,

like Carson, tried to overcome that deficiency by testifying that “all cases of exposure to these carcinogenic chemicals inexorably lead to physical injury taking the form of present cellular damage to the genetic material (DNA). . . . Plaintiffs have sustained such physical injury to their cells.” The *Abuan* district court noted that plaintiffs’ expert:

believes that *any* exposure to a toxic substance, no matter how minute or fleeting, always places a person at increased risk and justifies medical monitoring. His personal belief is *so all-encompassing and amorphous that it is of no utility in the context of this lawsuit.*

*Id.* at 333. The Ninth Circuit agreed and affirmed exclusion of plaintiffs’ experts’ opinions. The Ninth Circuit then discussed plaintiffs’ experts’ failure to demonstrate that plaintiffs were “exposed to harmful levels” of PCBs:

The experts simply concluded that the workers had been exposed and, as a group, were at risk for future injury and required medical monitoring. This testimony simply *did not suffice* to meet the requirements of each chosen cause of action.

*Id.* at 334.

Plaintiffs’ only response is to say, on page 18 of their response, that “*Abuan* does not control the present case because Oregon applies a bright-line physical injury rule.” Plaintiffs are wrong on the facts and the law. With respect to the facts, the *Abuan* plaintiffs’ expert (like Carson here) opined that “In my opinion, the available data show, to a reasonable degree of scientific certainty, that the Plaintiffs *have sustained such physical injury to their cells.*” *Id.* at 332. Thus, plaintiffs’ sole basis for distinguishing this case from *Abuan* fails.

With respect to the law, plaintiffs presumably are referring to *Lowe* in which, as discussed above, the Oregon Supreme Court required a “present physical injury” – not just any alleged physical injury at any time. And, as discussed above, plaintiffs have failed to satisfy what they incorrectly call the “bright-line physical injury rule” because plaintiffs generally

cannot alter reality simply by calling their supposed genetic transformation an “injury,” and because plaintiffs specifically in this case cannot escape the consequences of their own expert Carson’s admission that he “cannot honestly say” that genetic injury “persists to this day for any particular individual.” The Ninth Circuit’s decisions in *Abuan* and *Dumontier* are outcome determinative here.

Under controlling Oregon and Ninth Circuit precedent, Carson’s opinions about “genetic transformation injury” are not relevant, not reliable, and should be excluded (and plaintiffs’ corresponding claims fail as a matter of law).

C. Carson’s Testimony Is Not Reliable

Plaintiffs provide no basis to conclude that genetic transformation injury is real, or that Carson employed any recognized methodology in opining about it. Plaintiffs admit that Carson’s testimony is based on a “no threshold” theory that courts repeatedly have rejected.

Dr. Rossman showed that “the term ‘genetic transformation injury’ is a made-up term. It is not an accepted diagnosis.”<sup>7</sup> Plaintiffs do not cite a single authority to rebut this, and they do not provide any evidence that there is any such medical diagnosis. Plaintiffs note that KBR’s expert Dr. Beck testified about “genetic transformation” – of course, she does so in rebuttal to Carson’s opinions. Dr. Rossman showed in her uncontroverted declaration that genetic transformation is not an injury: “The idea that a single alteration in DNA is sufficient to lead to cancer and that the process, once started, is irreversible has been shown repeatedly not to be the case.”<sup>8</sup>

Why did Carson venture outside his field of expertise to say that genetic transformation is an injury, particularly when science and law both say that it is not? Carson is acting as an

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<sup>7</sup> Motion to Exclude X-3 at ¶ 9.

<sup>8</sup> *Id.* at ¶ 10.

advocate, not a scientist. The Court should be skeptical of all of the testimony proffered by a witness who is so willing to bend purported science to his clients' litigation needs.

- KBR pointed out on page 8 of its brief that Carson admits he does not have good methodology: ***"I'm not sure I have good scientific evidence to found that on."*** Plaintiffs do not show that there is any methodology at all to Carson's genetic transformation opinion.
- KBR pointed out on pages 4-7 of its brief that Carson gave the genetic transformation injury diagnosis to every single plaintiff who spent any time at Qarmat Ali – and to some who did not – and that ***Carson and Tarr admit the diagnosis is so limitless (and therefore meaningless) as to encompass everyone who walks into sunlight, lives in Houston, or just lives on the Planet Earth.*** Plaintiffs do not dispute any of this.
- KBR showed on page 8 of its brief that ***Carson admits he could have tested plaintiffs for genetic transformation, but he did not do so.*** Plaintiffs do not respond. They do not explain how Carson's opinion can be reliable in light of this omission.

Plaintiffs admit on page 8 of their response that Carson is relying on a "no threshold" theory. This admission is devastating because, as the court explained in *Henricksen v. ConocoPhillips Co.*, 605 F. Supp. 2d 1142, 1165-66 (E.D. Wash. 2009), the "no threshold" model used by Carson is junk science that has been rejected by the Federal Judicial Center.

The use of the no safe level or linear "no threshold" model for showing unreasonable risk "flies in the face of the toxicological law of dose-response, that is, that 'the dose makes the poison,' which refers to the general tendency for a greater dose of a toxin to cause greater severity of responses in individuals, as well as greater frequency of response in populations." Federal Judicial Center, Reference Manual on Scientific Evidence 475 (2d ed. 2000). Other courts have similarly rejected expert opinions that are based on the "no-threshold" model. As one court explained in excluding the plaintiffs' experts using the same no threshold theory, "[t]he linear non-threshold model cannot be falsified, nor can it be validated. To the extent that it has been subjected to peer review and publication, it has been rejected by the overwhelming majority of the scientific community. It has no known or potential rate of error. It is merely an hypothesis." *Whiting v. Boston Edison Co.*, 891 F. Supp. 12, 15 (D. Mass. 1995).

The Fifth Circuit rejected a "no threshold" theory *propounded by Carson himself*. In *Burleson v. Texas Dep't of Criminal Justice*, 393 F.3d 577 (5th Cir. 2004), Carson testified that

he did not have to calculate dose because cancer could be caused by the effect of radiation on a single cell in the body. *Burleson*, 393 F.3d at 587. Carson's opinions in *Burleson* are eerily similar to his opinions here: "In Dr. Carson's opinion, the thorium dust Burleson inhaled contained particles which lodged in his airways and damaged the surrounding cells." *Id.* at 582.

Plaintiffs' only response is to say on page 17 of their response that "While the Fifth Circuit discusses the dose threshold, the case does not turn on that issue." To the contrary, the Fifth Circuit discussed Carson's dose-related failings at length, rejected Carson's theory that there was no necessary threshold dose, and affirmed exclusion of Carson's testimony. *Id.* at 586-87. The Fifth Circuit's well-articulated basis for excluding Carson's opinions is extremely instructive and persuasive here.

We have previously stated in toxic tort cases that scientific knowledge of the harmful level of exposure to a chemical, and knowledge that the plaintiff was exposed to such quantities "are minimal facts necessary to sustain the plaintiffs' burden." Dr. Carson is even quoted affirming in his own scholarly papers that "an important step in studies relating to worker health and industrial exposure is the estimation of mean exposure level." Dr. Carson admits that the radiation dose a patient receives is critical to an evaluation of causation. He asserts that the lower the dose or exposure level, the lower the probability of causation. But even though Burleson's total dose potential or exposure level can be calculated, Dr. Carson has not determined the dose because he has "satisfied [him]self that it's sufficient."

...

Dr. Carson contends that the radiation dose to that area cannot be calculated individually, although Dr. Carson assures us, "[i]t's just high."

The magistrate judge was not required "to admit opinion evidence that is connected to existing data only by the ipse dixit of the expert. *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997). A court may rightfully exclude expert testimony where a court finds that an expert has extrapolated data, and there is "too great an analytical gap between the data and the opinion proffered." *Here, the magistrate judge found that Dr. Carson's opinion was based on speculation, guesswork, and conjecture to support his theory. The magistrate based his conclusion on the fact that Dr. Carson failed to conduct a dose assessment*, there was no scientific evidence linking thoriated



welding electrodes to lung or throat cancer, and the studies Dr. Carson did rely on concerned Thorotrast.

...

***The magistrate judge also concluded that Dr. Carson's testimony was irrelevant in that he had not presented any reliable evidence regarding the extent of Burleson's harmful level of exposure....*** Thus, it was not an abuse of discretion for the magistrate judge to exclude Dr. Carson's testimony.

The Fifth Circuit's decision in *Burleson* addresses this same plaintiffs' expert (Carson), the same alleged impact (cellular injury), the same potential future injury (cancer), and the same fundamental failure by Carson (no calculation of dose or exposure level), and Carson's generalized approach and multiple failings here exceed his failings in *Burleson* that resulted in his exclusion under *Daubert*. Carson's genetic transformation (and other) opinions in this case are unreliable and irrelevant and should be excluded.

D. It's Not KBR's Fault that Carson Uses Junk Science.

Plaintiffs levy a series of false and unsupported allegations against KBR in an attempt to distract from Carson's failings and try to justify Carson's use of junk science. Plaintiffs characterize KBR as having engaged in "spoliation," which it did not, and seek a free pass from *Daubert* as a result. KBR has addressed plaintiffs' factually and legally incorrect spoliation arguments at Dkt. Nos. 230, 345 and 420, and KBR incorporates those responses here.

## II.

### Carson's Remote Exposure Injury Testimony Is Inadmissible.

KBR showed on pages 8-10 of its motion that Carson opined that every plaintiff had something he called a "remote exposure injury," but at his deposition, Carson could not explain what it was and said: "I haven't satisfied myself that I understand the remote exposure injury as I used it"; "I'm not clear about the basis of that remote exposure injury statement." Since Carson did not know what remote exposure injury was, he was unable to explain his methodology



“because I don’t know it.” KBR showed on pages 10-11 of its motion that, as with genetic transformation injury, Carson did not have any methodology, instead admitting that he merely ascribed the “injury” to everyone who spent any time at Qarmat Ali.

Plaintiffs point out on page 18 of their response that – like the words “genetic transformation” – the words “remote exposure” can be ascribed a meaning. Carson says a remote exposure is an exposure that happened a long time ago. But as with genetic transformation “injury,” Carson added the word “injury” to an otherwise-understandable phrase to create what plaintiffs try (and need) to call a medical “diagnosis” that no one (including Carson himself) understands. Plaintiffs do not offer any evidence that this so-called “remote exposure injury” is a real disease.

As KBR showed on page 11 of its motion, Carson candidly admitted that it was just a term that he used to describe an exposure. Plaintiffs did not distinguish the *Lowe* case, discussed in KBR’s brief, which shows that a mere exposure is not a compensable injury. In fact, plaintiffs on page 5 of their response actually support KBR’s argument by *distinguishing* “remote exposure injury” *from* “illness.”

As KBR showed on page 11 of its motion, ***Carson admitted that he had plaintiffs diagnose themselves with “remote exposure injury.”*** Carson said “if they endorsed any illness or symptoms that ***they believe*** were – was directly associated with their presence at Qarmat Ali, then they were in that category.” That may be good advocacy, but it’s atrocious science.

Plaintiffs say on page 22 of their response that medical experts may rely on plaintiffs’ statements. They cite no cases, however, showing that an expert may rely on some statements while ignoring directly contradictory statements and allowing plaintiffs to diagnose themselves. Carson did not review plaintiffs’ sworn statements in their depositions, did not review their

contemporaneous PDHAs to the U.S. Army, and conducted only a questionable review of their medical records. *See* Dkt. 312 (KBR's Motion to Exclude Testimony of Plaintiffs' Expert Dr. Arch Carson Re Causation).

Carson's opinions may be among the least reliable ever offered in this Court. Carson's deficiencies under *Daubert* are legion. The fundamental problem with Carson's opinion discussed here is *not* that he cherry-picked among plaintiffs' contradictory statements and ignored their sworn testimony in this case and ignored their contemporaneous writings. (That certainly *is* a problem too.) The problem is that Carson allowed the plaintiffs to diagnose themselves even though *none* of them are medical doctors and *all* of them are self-interested. In *In re TMI Litig.*, 193 F.3d 613, 698 (3d Cir. 1999), the Third Circuit explained that the opinion of a "physician who had been retained strictly for litigation purposes" is not reliable when it bases "pathological causation on nothing more than a plaintiff's self-report of an illness."

### III.

#### Carson's Medical Monitoring Testimony Is Inadmissible.

Carson's medical monitoring opinions are irrelevant because medical monitoring damages are as a matter of law not recoverable.

In *Metro-North Commuter R.R. Co. v Buckley*, 117 S. Ct. 2113, 2121 (1997), the U.S. Supreme Court considered the claims of a railroad worker plaintiff who had been exposed to asbestos but who had not manifested an asbestos-related disease or symptom of such a disease. The *Metro-North* plaintiff sought to recover "the economic cost of the extra medical checkups that he expects to incur as a result of his exposure to asbestos-laden insulation dust." After canvassing the state-law cases, the U.S. Supreme Court rejected plaintiff's claim and rejected his request for medical monitoring, explaining that:

***tens of millions of individuals may have suffered exposure to substances that might justify some form of substance-exposure-related medical monitoring. . . .***

And that fact, along with uncertainty as to the amount of liability, could threaten both a “flood” of less important cases (potentially absorbing resources better left available to those more seriously harmed . . .) and the systemic harms that can accompany “unlimited and unpredictable liability” (for example, vast testing liability adversely affecting the allocation of scarce medical resources).

*Id.* at 2123.

The Oregon Supreme Court reached the same result in *Lowe v. Philip Morris USA, Inc.*, 183 P.3d 181 (Or. 2008). In that case, plaintiff Lowe was a cigarette smoker who had not “suffered any present physical harm.” *Lowe*, 183 P.3d at 183. She asked the trial court to create a court-supervised medical monitoring program. The trial court dismissed her lawsuit, and the Oregon Supreme Court affirmed. *Id.* at 182. Lowe argued “that a present physical injury is only necessary in order to recover emotional distress damages.” *Id.* But the court declined to draw a distinction between medical monitoring and emotional distress damages:

***Plaintiff has not alleged that her exposure to defendants’ products has resulted in any present physical effect, much less any present physical harm.*** Nor has she alleged that any future physical harm to her is certain to follow as a result of that exposure. Rather, she has alleged only that her exposure to defendants’ products has significantly increased the risk that she will contract lung cancer sometime in the future. It is sufficient for the purposes of this case to hold only that, under *Zehr* and *Bollam*, the threat of future physical harm that plaintiff has alleged is not sufficient to give rise to a negligence claim.

*Id.* at 185. Lowe tried to characterize future medical monitoring costs as a concrete economic harm. But because of the economic loss rule, this alleged harm was not cognizable in tort:

Plaintiff has not alleged an injury to her person or property, nor has she identified any duty that defendant owes her beyond the common-law duty to exercise reasonable care. Under *Oregon Steel Mills* and a long line of this court’s cases, the present economic harm that defendants’ actions allegedly have caused—the cost of medical monitoring—is not sufficient to give rise to a negligence claim.

*Id.* at 186. In sum, “negligent conduct that results only in a significantly increased risk of future injury that requires medical monitoring does not give rise to a claim for negligence.” *Id.* at 187. *Lowe* squarely shows that plaintiffs here have no cause of action for medical monitoring. Worse, Carson has not even quantified any purported “increased risk.”<sup>9</sup>

Earlier this year, the Oregon Supreme Court applied *Lowe* in *Paul v. Providence Health Sys.-Oregon*, 273 P.3d 106 (Or. 2012). Plaintiffs ignored this case. No attempt to distinguish. No mention at all.

In *Paul*, the Oregon Supreme Court considered the claims of plaintiffs who alleged their credit information had been stolen due to the negligence of defendant Providence. Although they did not allege “that any unauthorized person ever had accessed any of the information,” they did allege “that defendant’s negligence created the *risk* of future identity theft, and they seek economic damages for the past and future expense of credit monitoring services and related expenditures made to address the risk of identity theft.” *Paul*, 273 P.3d at 108, 109. Applying *Lowe*, the court held that “plaintiff’s allegations here are insufficient because ***plaintiffs do not allege actual, present injury caused by defendant’s conduct.***” *Id.* at 110. The Oregon Supreme Court affirmed dismissal for failure to state a claim, and explained that “*Lowe* indicates that the cost of monitoring to protect against an increased risk of harm – in the absence of present injury – is not recoverable in a negligence action.” *Id.* at 111.

Plaintiffs’ allegations here fail to state a claim for the same reasons. This Court should grant summary judgment against all plaintiffs’ claims for medical monitoring.

As well, plaintiffs do not dispute that, in jurisdictions *unlike* this one where medical monitoring claims are recognized, a plaintiff still must “prove that, by reason of increased

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<sup>9</sup> Motion to Exclude X-1 (Carson depo) at 162:8-11.

exposure, a reasonable physician would prescribe for the plaintiff a monitoring regime different from one that would be prescribed had the exposure never occurred.” *Allgood v. General Motors Corp.*, 2006 WL 2669337 at \*26 (S.D. Ind. Sep. 18, 2006). Plaintiffs do not provide any evidence that a reasonable physician would prescribe Carson’s lung-cancer monitoring regime to plaintiffs.

KBR pointed out on pages 14-15 of its motion that Carson has not employed any recognized methodology to derive his medical monitoring opinion. Plaintiffs do not attempt to distinguish the *Allgood* case discussed on page 13 of KBR’s motion, in which the court holds that medical monitoring opinions are inadmissible where, as here, the expert did not consider the scientific authorities on medical monitoring. Plaintiffs’ only response to *Allgood* is to say, on page 24 of their response, that Carson was never asked the question. False. Carson admitted in his deposition that he was not aware of any other doctor or professional or scientific paper agreeing with his opinion that this type of population warrants the type of medical monitoring he proposes.<sup>10</sup>

KRB showed on page 14 of its motion that Carson admitted he is not offering his medical monitoring opinion to a reasonable medical certainty. That testimony, too, dooms Carson’s medical monitoring opinion. Plaintiffs try to muddy Carson’s testimony about medical monitoring by pointing to his testimony about a study of 30-pack-per-year smokers. That does not save Carson from his own admission. And, worse, Carson’s testimony about 30-pack-per-year smokers further undermines plaintiffs’ claims.

Carson admitted at his deposition that medical monitoring for lung cancer historically has *not* been recommended even for high-risk individuals such as heavy smokers. Carson:

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<sup>10</sup> Motion to Exclude X-1 at 316:18 – 317:2.

Until 2005, there was no good scientific evidence that lung cancer screening programs, even in high-risk individuals, led – did lead to early detection as of that time, but the result of *the early detection did not translate into reduced scientific mortality*. And so because of that and the other things that you mentioned earlier and that I amplified upon, the negative effects of screening, *most organizations that have been involved in those screening studies have been unable to recommend them* at that point when they were – they were done.<sup>11</sup>

Due to a recent study, some scientists have recently reconsidered screening, but only for individuals who have smoked the equivalent of a pack of cigarettes *every day for 30 years*.

Q. Okay. Has it been recommended for light smokers, past smokers, or smokers who have had pack years of less than 30 years?

A. I don't believe so.<sup>12</sup>

Carson admitted that his medical monitoring opinion was based on his assertion that the unquantified exposures for some unidentified plaintiffs from their brief and varying self-reported time at Qarmat Ali (hours, days, or weeks) yielded greater lung cancer risk than smoking a pack a day for 30 years.<sup>13</sup> Carson admitted that he could not say this to a reasonable medical certainty.<sup>14</sup> Thus, Carson's opinion could not provide evidentiary support for medical monitoring even if it were recoverable which, as a matter of law, it is not.

### Conclusion

The Court should exclude Carson's genetic transformation injury, remote exposure injury, and medical monitoring opinions.

Date: June 12, 2012

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<sup>11</sup> X-4 (Carson depo) at 314:19 – 315:4.

<sup>12</sup> *Id.* at 315:20-23.

<sup>13</sup> *Id.* at 315:24 – 316:6.

<sup>14</sup> *Id.* at 317:22 – 318:7.

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This brief complies with the applicable word-count limitation under LR 7-2(b), 26-3(b), 54-1(c), or 54-3(e) because it contains 6,045 words, including headings, footnotes, and quotations, but excluding the caption, table of contents, table of authorities, signature block, and any certificates of counsel.

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